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-1125 GGAATTCCTG AAAACACTCA AGTTTAAGTA AAAGGTAGGT AGGGGCACTG GGGTGATAAA
EcoRI GATA-3

-1065 AGAGCTGGAG GGAACACTACAT GTTTAAAAGA CCGAGGGCTA GGAGGGGTTA AATAGTCAAG
1006E|→

-1005 GATCTTAAAG ACGTCGTCAA TAGCTAGAAT GTGGAGCTGA GACAGGCATT GACGAGATGA

-945 AGTCCGAAGC CTTTTGTCTG CTAAGTCTGC TTCAGACAGA AATCTTTTTG GTTGAAAGTG

-885 ACCACTGATC CACTAAGAAA AAAAAAGAGG TCCTTTTTTG GCTCAGTAGC TAAAACGGCA
|→862E

-825 GGGCTTTCAA GATCAAACAT GTCATTGAGT TTTGACACCT CTCTCATCTT TGCTCTCTTT

-765 GTGTTAGCTT CATTCTTTCT GTGAAATGGT CCCCTGATCT CCCCAGAACA CAGCGTGGAA

-705 GGAACCATTG ATATTGGTTG CTTATGCAGA TCTCAGAACT TTCAAGGCCA CCTTCTTTTC

-645 AGGAGGTCTA GACCTATCTA GCTTAGATTC CCCAGGAGAA TGGCAAGATC TTGGCCTTGT

-585 CTGAGCTTAT GGAAGCAGAG AAGGGGGCAG GTGCAAAAGA CTCTCTTCCA GAACTCCGGA

-525 GAAATTTGCT TTTCAAACT AGACAGCACC CTGCTGCCTA CTAAAGAAGT AGGTCCAAGG

-465 TCCTAATGTG CATATTCTCC GCTATACTCT TAGCTTTCCA GAAACTAGA ATCATCAGTT

-405 TGGGTAAGAA CATAGAGGAA AACAGAAACG CCCCCAACC TACCCCATGT CCAGAGAGCC

-345 TTGACCTACT TGTCTCCCTC CCACTCTCAA CCCTCCAGT CTGCTTCAA ACCTCTCCAC
283E|→

-285 GTCATGCCCC AACTTCGGAG CATTTGAACT CTGAGCAGTG GGGTCGCTTT CGCCTCAAGC
CREB

-225 ACACCCACC TCGGCAGGCC CAGTCAAAGG TCCCTCACAG GGACACCTTT TTTTCCCTGG

-165 GATCCCGCGC TTCGCCTCCG GGGCGGAGAC TCCTCCCCTA GTAGTTCCAC TTGTGTTCCC
SP1 E-Box

↓r 133E|→ ↓h

-105 TAGAAGAGCA GCCGGGACGG CAAGAAGCCG GGACCTCCCC CTTCGTTCCA GGAAGTGGCG

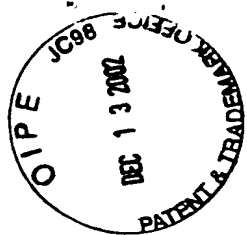
-45 CGCAGTGGGC ACTTCAGCCC TGGAGGCCGC GAGCCCCACC CGGGTGAAGG CGGCTGCGCG
+1

+16 GCTTCAGCAC CACGGACAGC GCTCCCGTCC GCAGCCCTTG TGTCAGCGAG CGTCCGCGCT
NRSE/RE1 Eco47III

+76 CGCGCTATGC AGGCGCATGG CCCGGTGCTC CAACTCTATG GCGCTGCTGT TCAGCTTTGG

+136 CCTCCTTTGC CTGTGTTCAg gtaagaatt (SEQ ID NO: 22)

FIG. 1



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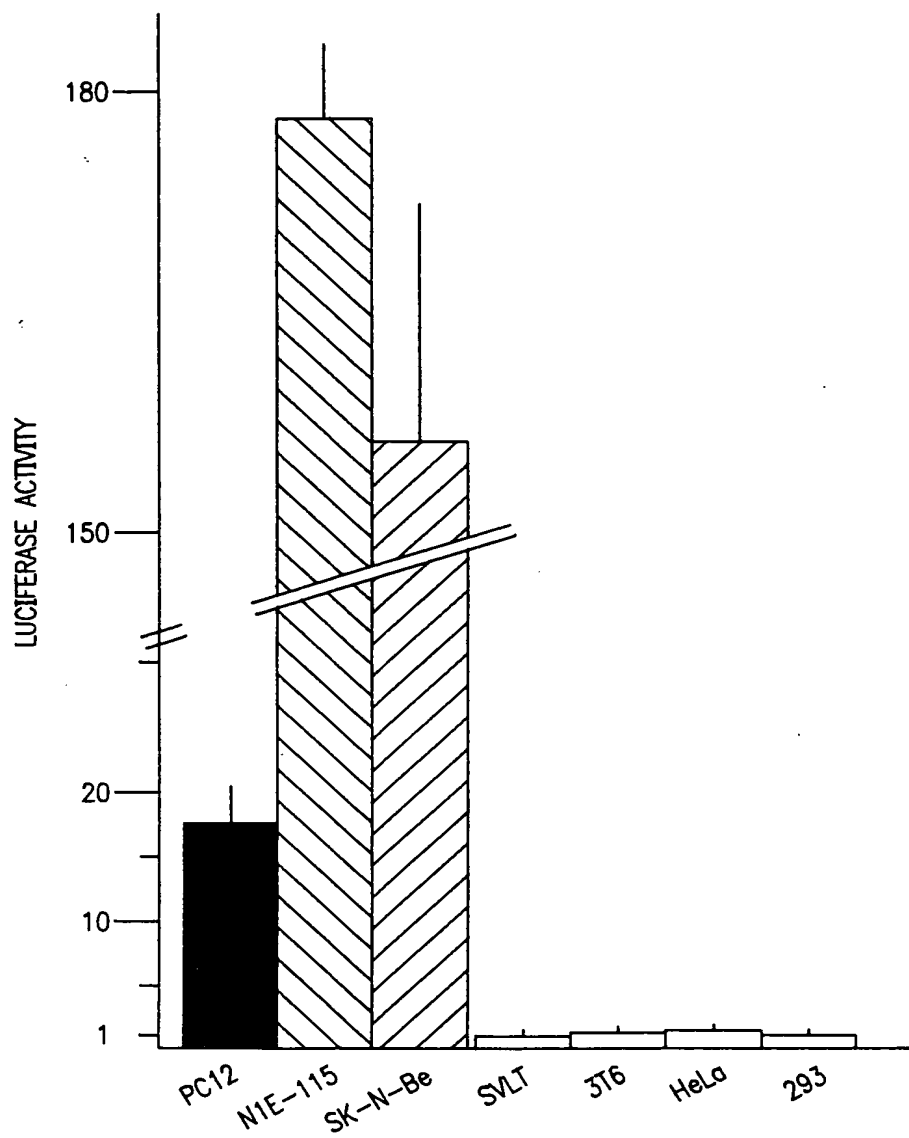


FIG. 3

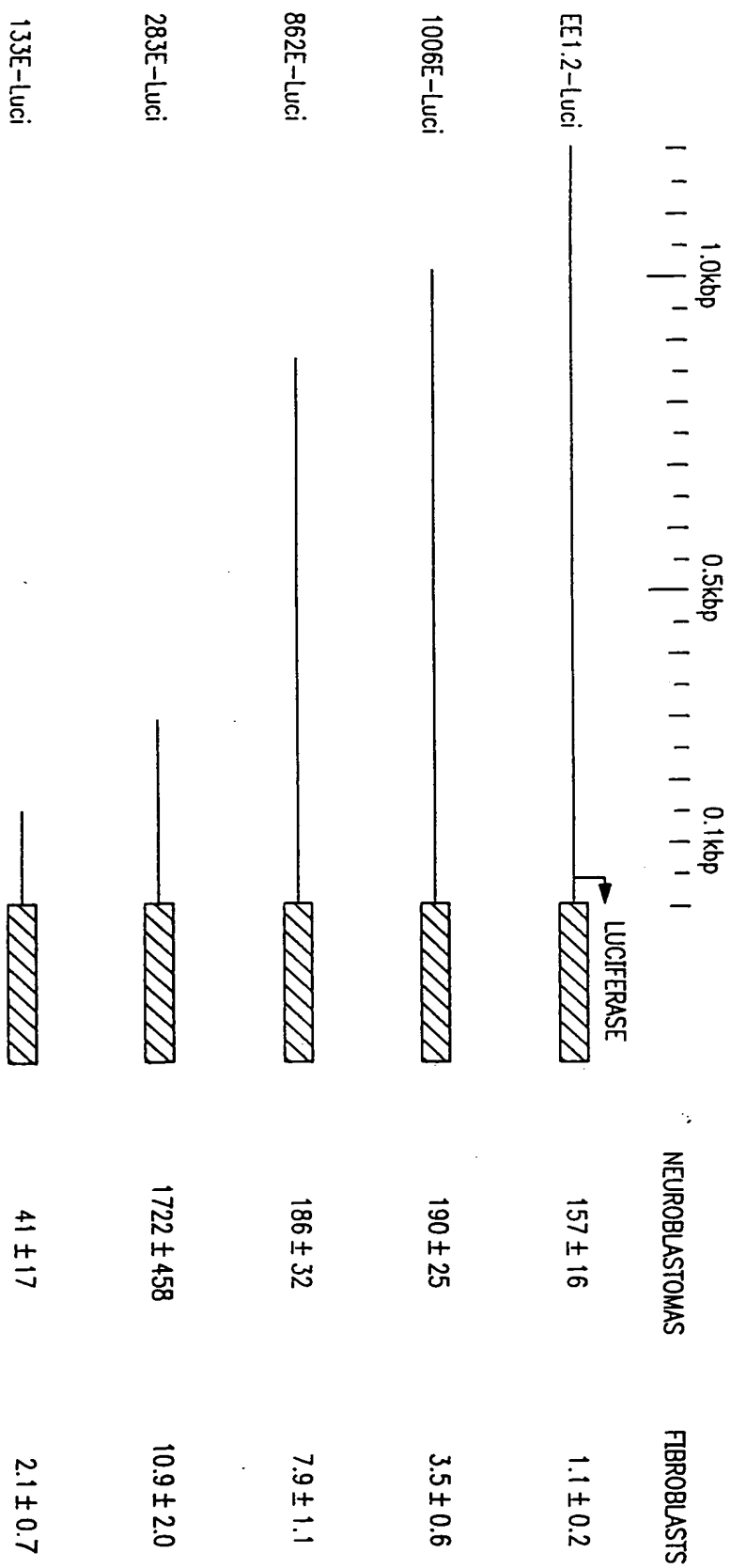


FIG. 6

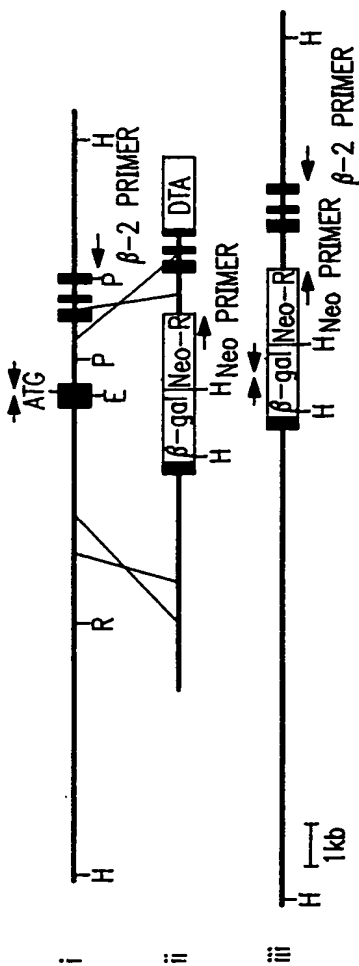
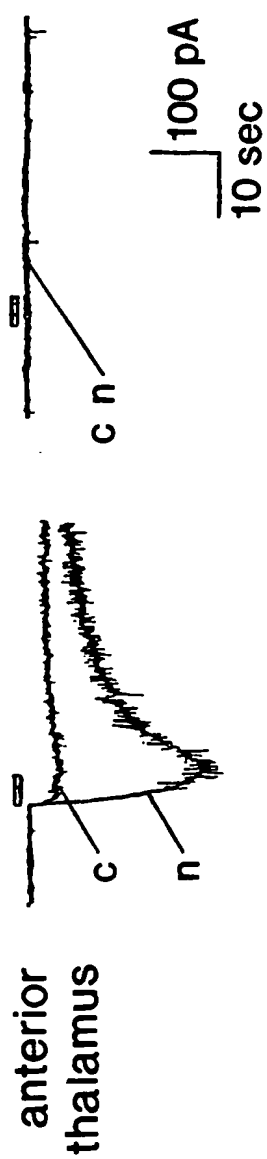
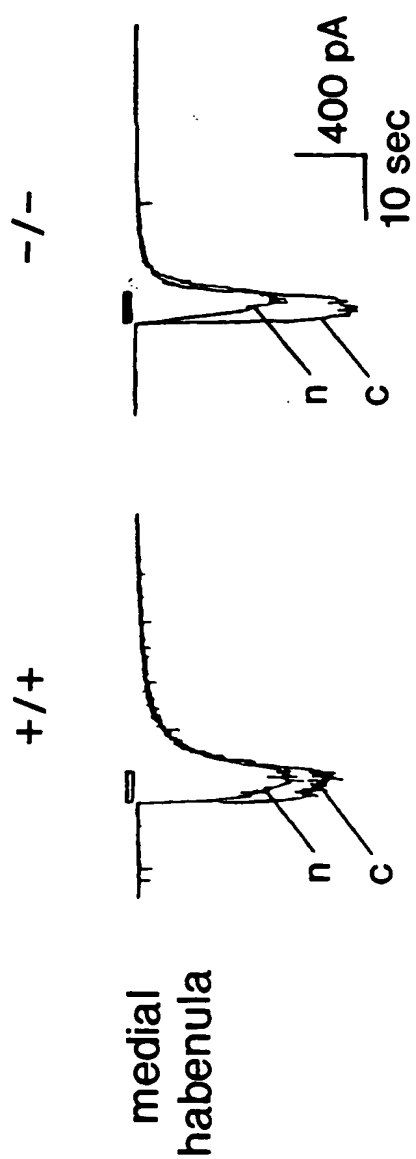
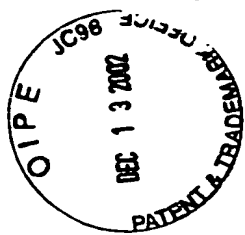


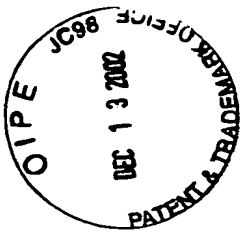
FIG. 8A



n - nicotine 10 μ M
c - cytosine 10 μ M

FIG. 10A

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NUCLEUS	GENOTYPE	# CELLS TESTED	RESPONSES	% RESPONSE
ANTERO-DORSAL THALAMUS	+/+	22	22	100
	-/-	15	0	0
LATERO-DORSAL THALAMUS	+/+	14	14	100
	-/-	9	0	0
ANTERO-VENTRAL THALAMUS	+/+	36	36	100
	-/-	10	0	0
MEDIAL HABENULA	+/+	8	8	100
	-/-	9	8	89

FIG. 10B

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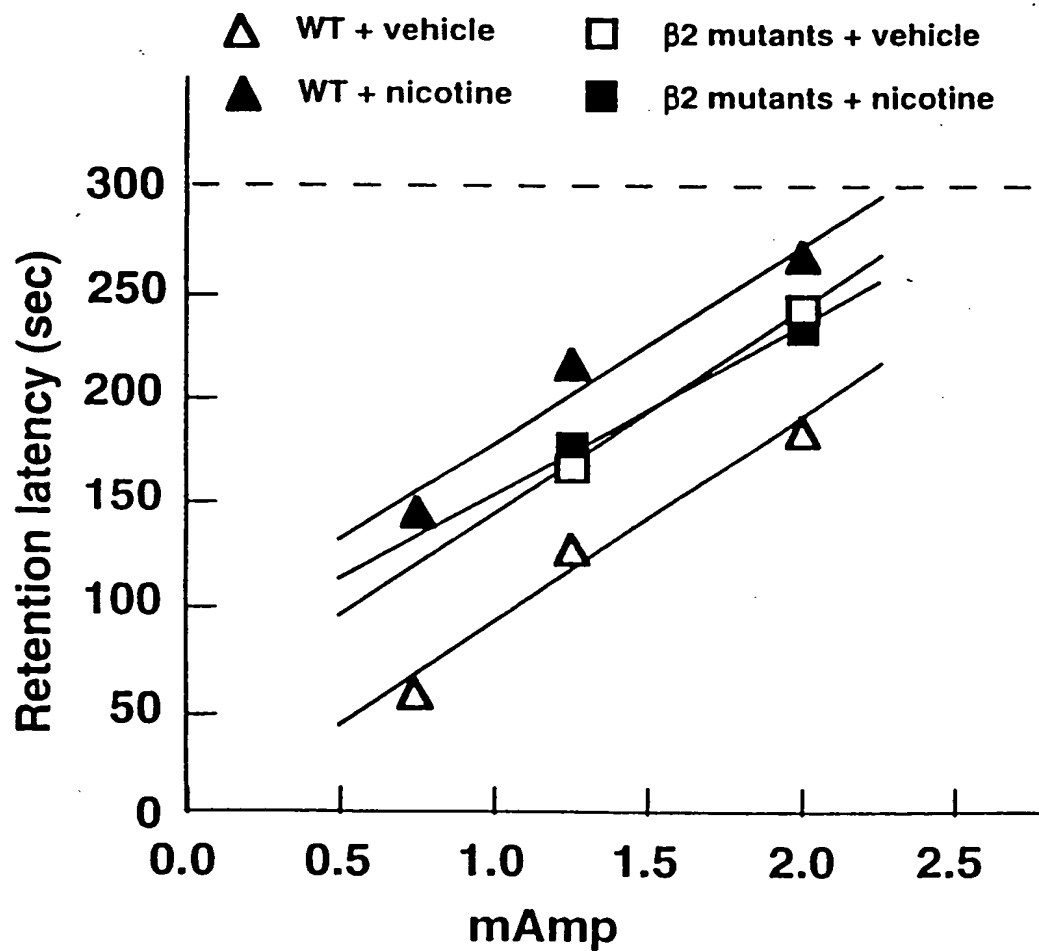
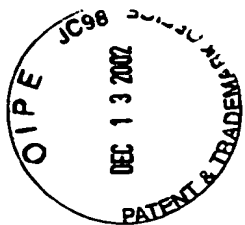


FIG. 1 IA

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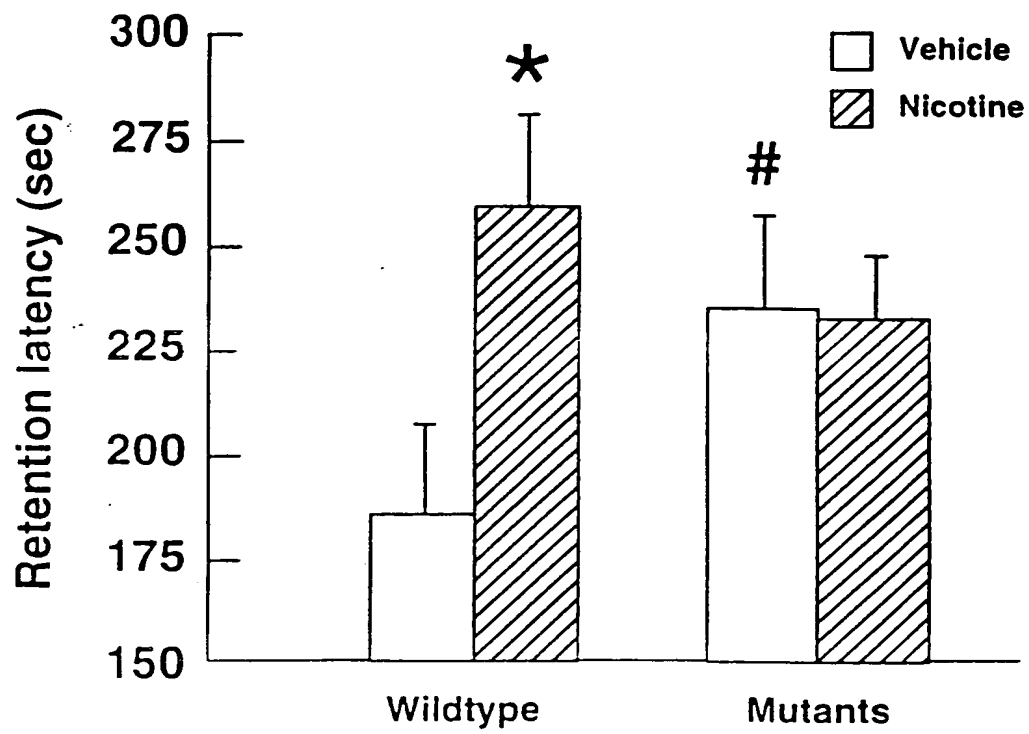
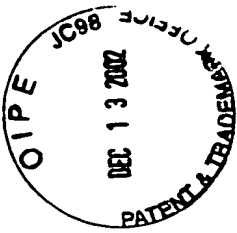
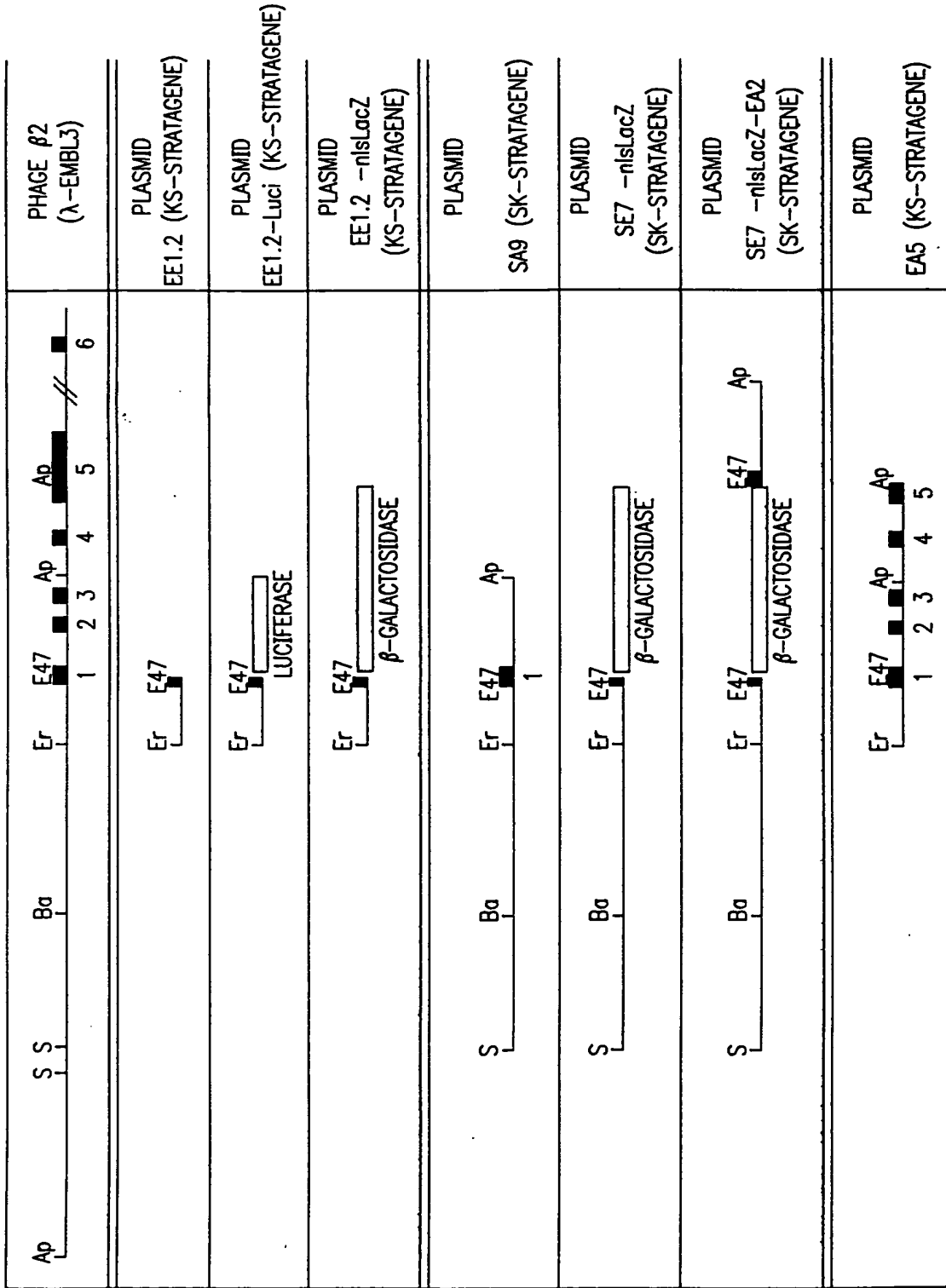


FIG. 1 IB

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Ap:Apa1
 S:Sal I
 Ba:BamH I
 Er:EcoR I
 E47:Eco47 III

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FIG. 12